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In the Matter of

Review of the Emergency Alert System

Quantifying the Ability of Broadcasters to Reach Non-English Speakers

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The purpose of this comment is to announce the publication of a study that may inform this proceeding.

J. M. Peha & M. S. Yu, "Broadcasting Emergency Information to Non-English Speakers,"

2017 IEEE International Conference on Technologies for Homeland Security.

www.ece.cmu.edu/~peha/Broadcasting Emergency Info to Non English Speakers.pdf

Abstract

Television and radio have been the primary means of communicating emergency information in the U.S, following a natural disaster or a terrorist attack. However, this system does not always reach individuals with limited English proficiency (LEP). This paper uses TV and radio data, census data, and disaster risk data to estimate that over two million LEP individuals are not served by broadcasters in their native language. While many focus on Spanish-speakers, a large number of the unserved speak other languages, such as Korean and Vietnamese, with less access to broadcasts in their language. Geographically, many live outside of the cities with the largest concentrations of immigrants. Additionally, while AM radio and full-power TV are the most important media, on the order of 100 thousand individuals are served by low-power TV (LPTV) alone, and risk losing access to broadcasts in their own language if LPTV stations were to cease operation. These findings suggest the importance of supplementing traditional broadcast solutions with new technologies, including smart phones and social media.

Among the implications for this proceeding:

- The problem addressed in this proceeding is serious, and worthy of attention. Millions of
 individuals in the U.S. have limited English proficiency (LEP) and cannot receive any TV or radio
 broadcasts in their native language during a disaster. A comparable number of LEP individuals
 are served in their native language by exactly one broadcaster, and are at risk if that broadcaster
 fails during a disaster. These numbers will get worse if foreign-language low-power television
 (LPTV) stations cease operations.
- Unserved LEP individuals are more heterogeneous than some people realize. Some live well
 outside the cities with high immigrant populations, or speak languages less common than
 Spanish. As a result, there may be no single solution for all LEP individuals; it may take a variety
 of technologies and public policies to make emergency information available to the vast
 majority of LEP individuals.
- The analysis in this paper is just the beginning. There is much more useful analysis to do.

For more information, see

www.ece.cmu.edu/~peha/Broadcasting Emergency Info to Non English Speakers.pdf